

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION N	io.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/797,186		03/11/2004	Akiko Niimi	119077	4948	
25944	7590	04/14/2006		EXAM	EXAMINER	
	& BERRID	GE, PLC	CRENSHAW	CRENSHAW, MARVIN P		
P.O. BOX 19928 ALEXANDRIA, VA 22320				ART UNIT	PAPER NUMBER	
				2854		
			DATE MAILED: 04/14/2006			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Amml	ination No	Annlinant(-)					
Office Action Summary			ication No.	Applicant(s)					
			97,186	NIIMI, AKIKO					
			niner	Art Unit					
	The MAN INC DATE AND		in P. Crenshaw	2854					
Period fo	The MAILING DATE of this commu or Reply	nication appears o	n the cover sheet with the	correspondence ad	1dress				
THE - External after - If the - If NC - Failu Any I	ORTENED STATUTORY PERIOD IN MAILING DATE OF THIS COMMUN IN IT IT IS A WAILING DATE OF THIS COMMUN IN IT IS A WAILING DATE OF THIS COMMUN IN IT IS A WAILING TO THE WAILING THE	IICATION. s of 37 CFR 1.136(a). In munication. 30) days, a reply within th tatutory period will apply y will, by statute, cause th	no event, however, may a reply be to ne statutory minimum of thirty (30) do and will expire SIX (6) MONTHS fro ne application to become ABANDON	imely filed ays will be considered time in the mailing date of this of ED (35 U.S.C. § 133).	ly. communication.				
Status	•		· .						
1) 又	Responsive to communication(s) fil	ed on <i>01 March 2</i>	006.						
· · · ·	☐ This action is FINAL . 2b)☒ This action is non-final.								
3)□									
,—	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims								
•	4)⊠ Claim(s) <u>1 - 16</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
	Claim(s) is/are allowed.								
· <u> </u>	Claim(s) 1- 12 is/are rejected. Claim(s) 13 - 16 is/are objected to.								
· · · · · · · · · · · · · · · · · · ·									
· <u> </u>	Claim(s) are subject to restri	ction and/or electi	ion requirement.						
Applicati	on Papers								
	•	o Evaminor	•						
9) The specification is objected to by the Examiner.									
10)[The drawing(s) filed on 11 March 2004 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is chicated to See 37 CFR 1.434(d).								
11)	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
	·			o / totton or 10mm ;	102.				
	Inder 35 U.S.C. § 119	for foreign priority	don 25 H C C C 440/	a) (d) (f)					
_	Acknowledgment is made of a claim	nor toreign prioni	y under 35 0.5.C. § 119(a	a)-(a) or (t).	,				
αŅ	a)⊠ All b) Some * c) None of: 1.⊠ Certified copies of the priority documents have been received.								
	2. Certified copies of the priority			tion No					
	3. Copies of the certified copies			•	Stage				
	application from the Internation			rea in this National	Stage				
* S	ee the attached detailed Office action	•	` ''	ed.					
	•								
Attachment			_						
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (I	OTO 048)	4) Interview Summar Paper No(s)/Mail [
	e of Draπsperson's Patent Drawing Review (I nation Disclosure Statement(s) (PTO-1449 o		5) Notice of Informal		O-152)				
	No(s)/Mail Date	,	6) Other:	•					

DETAILED ACTION

Drawings

The drawings were received on March 1, 2006. These drawings are accepted.

Allowable Subject Matter

Claims 13 – 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

With respect to claim 13, the prior art does not teach or render obvious the total combination as claimed including at least one of the screen plate and the frame includes at least one of a projection and a groove, and the printing medium supporting member includes the other of the projection and the groove such that when the screen plate and the frame are detachably connected to the printing medium supporting member the at least one projection connects with the at least one groove to lock the screen plate in position relative to the printing medium supporting member.

With respect to claim 16, the prior art does not teach or render obvious the total combination as claimed including a printing device wherein said screen plate comprises a first frame member and at least a pair of second frame members, said frame members of said at least one pair of second frame members opposing one another and slidably engaged with an underside of said first frame member by interlocking grooves.

Art Unit: 2854

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 4 – 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koizumi et al. in view of Rodi.

Koizumi et al. teaches a screen plate (See col. 1, lines 24 – 25) fitting detachably onto said supporting face in a state where the printing medium is sandwiched between said screen plate and said supporting face of said printing medium supporting member and an ink-jet head (31) for performing ink-jet printing onto said printing medium.

However, Koizumi et al. does not teach printing device comprising a printing medium supporting member having a supporting face for supporting a printing medium and for transporting the printing medium through a plurality of printing devices of different types.

Page 4

Art Unit: 2854

Rodi teaches a printing device (Fig.1) comprising a printing medium supporting member (6) having a supporting face for supporting a printing medium (See col. 4, line 19) and for transporting the printing medium through a plurality of printing devices of different types.

It would have been obvious to modify Koizumi et al. teaches that it is desirable to use one medium supporting member for transporting a medium between more than one printing device.

With respect to claim 4, 6 and 7, Koizumi et al. teaches a printing device wherein a plurality of said screen plates (See col. 1, lines 18 – 25) of different types are prepared and a printing device wherein the printing medium is a fabric (See col. 1, lines 14 - 18).

With respect to claim 5, Koizumi et al. does not teach a printing device wherein said printing medium supporting member comprises an adjustment mechanism.

Rodi teaches to have printing device wherein said printing medium supporting member comprises an adjusting mechanism (See Col. 2, lines 45 – 67). It would have been obvious to modify Koizumi et al. to have a printing device wherein said printing medium supporting member comprises an adjustment mechanism as taught by Rodi to provide a means for adjusting the medium with respect to the ink-jet printhead.

Art Unit: 2854

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Koizumi et al.

With respect to claim 10, Koizumi et al. teaches a printing method comprising the steps of screen printing onto a printing medium using a screen plate (See col. 1, lines 24 – 25) and ink-jet printing (31) by emitting ink of a darker color than the ink used in said screen printing step, onto the screen printed region, from an ink-jet head.

With respect to claim 11, Koizumi et al. teaches a printing method wherein the ink used in said screen printing step is set depending upon the screen plate (See Col. 1, lines 24 - 25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 3, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koizumi et al. in view of Rodi and further in view of Siegeritz.

Art Unit: 2854

Koizumi et al. in view of Rodi teaches all that is claimed, as discussed in the above rejection of claim 1 except, an ink determining means for determining the density of ink and the color.

Siegeritz teaches a printing device further comprising ink color determining means (See paragraph 0014) for setting the color of the ink used in printing by means of said screen plate to a lighter color than the ink used in printing means of the ink emission section and a printing device wherein said ink color determining means set the color of the ink used in printing by means of the screen plate to white (See paragraph 0067).

It would have been obvious to further modify Koizumi et al. to have an ink determining means for determining and setting the color used in printing to white as taught by Siegeritz so as to provide an efficient means for selecting the color of ink to use for printing.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koizumi et al. in view of Rodi and further in view of Thorpe.

Koizumi et al. teaches a screen plate (See col. 1, lines 24 – 25) fitting detachably onto said supporting face in a state where the printing medium is sandwiched between said screen plate and said supporting face of said printing medium supporting member and an ink-jet head (31) for performing ink-jet printing onto said printing medium.

Application/Control Number: 10/797,186 Page 7

Art Unit: 2854

However, Koizumi et al. does not teach printing device comprising a printing medium supporting member having a supporting face for supporting a printing medium and for transporting the printing medium through a plurality of printing devices of different types.

Rodi teaches a printing device (Fig.1) comprising a printing medium supporting member (6) having a supporting face for supporting a printing medium (See col. 4, line 19) and for transporting the printing medium through a plurality of printing devices of different types.

It would have been obvious to modify Koizumi et al. teaches that it is desirable to use one medium supporting member for transporting a medium between more than one printing device.

With regard to claim 12, Koizumi et al. in view of Rodi does not teach a frame, wherein the screen plate together with the frame have a lock-and-key relationship with the printing medium supporting member.

Thorpe teaches a frame (13) wherein the screen plate (16) together with the frame have a lock-and-key relationship with the printing medium supporting member (Fig.1). This lock and key relationship is achieved by the groove 23 and projection 24.

It would have been obvious to further modify Koizumi et al. to have the screen plate and the frame include at least one projection and a groove as taught by Thorpe to provide a secure means for locking the screen plate to the frame while printing.

Response to Arguments

Art Unit: 2854

Applicant's arguments, filed March 1, 2006, with respect to the rejection(s) of claim(s) 1 - 16 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Koizumi et al. Koizumi et al. teaches a method of screen printing. And Rodi has been added to teach a printing device having the ability to have more than one printing device on a frame (See col. 1, lines 41 – 64) and using one supporting member.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marvin P. Crenshaw whose telephone number is (571) 272-2158. The examiner can normally be reached on Monday - Thursday 7:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2854

Page 9

MPC

March 30, 2006

Daniel J. Colilla Primary Examiner Art Unit 2854